

CLAIMS

1. Electronic device comprising an integrated circuit chip (300) intended to contain or process informative data needing to be securely protected, a first side (A) of the chip comprising at
5 least one first conductive element (30), and another side (B) of the chip comprising another conductive element (200), the first conductive element (30) and the other conductive element (200) being coupled.

10 2. Device according to claim 1, characterised in that the first side (A) of the chip comprises, additionally, a second conductive element (40) arranged in proximity to the first conductive element (30) and/or connected in series (39) with the
15 first conductive element (30).

3. Device according to claim 2, characterised in that the first conductive element (30) and the second conductive element (40) comprise
20 alternate intermingled, wound or intertwined patterns.

4. Device according to one of claims 1 to 3, characterised in that the first conductive element (30) has a transmitting armature.
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5. Device according to one of claims 1 to 4, characterised in that the first conductive element (30) and/or the second conductive element (40) comprises an inductance.

6. Device according to one of claims 1 to 5, characterised in that the other conductive element (200) comprises an earth plane conductance or a low resistance.

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7. Device according to one of claims 1 to 6, characterised in that it comprises means for the electromagnetic excitation of the first conductive element.

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8. Device according to one of claims 1 to 7, characterised in that the integrated electronic circuit comprises means for measuring the inductance of at least one of the conductive elements and/or for
15 detecting variation in the inductance.

9. Device according to claim 8, characterised in that it comprises means for deleting or ceasing to store the informative data in the event
20 of a change being detected in the value of the inductance.

10. Device according to one of claims 1 to 9, characterised in that the first conductive element
25 (30) and/or the second conductive element (40) is connected to the integrated electronic circuit (T) inside the chip (100, 500), whereas the other conductive element (200) is not connected.

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11. Device according to one of claims 1 to 10, characterised in that the chip (500) comprises

upper coating layers (50, 60, 80) including at least one metal or conductive level (52-62, 58-68) allowing the first conductive element (30) to be connected with the integrated electronic circuit (T, 100) and/or with the second conductive element (40).

12. Device according to one of claims 1 to 11, characterised in that the first and/or the second conductive element (30/40) forms a circuit loop.

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13. Device according to one of claims 1 to 12, characterised in that the other conductive element (200) forms an earth plane or an equipotential.

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14. Device according to one of claims 1 to 13, characterised in that the first and/or the second conductive element (30/40) comprises at least one longilinear metal track (32/42).

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15. Device according to one of claims 1 to 14, characterised in that the first and/or the second conductive element (30/40) comprises several interconnected sections (32, 33, 34/42, 43, 44) arranged in a substantially concentric way, so as to form a corrugation or a polygonal spiral or to form a substantially circular spiral.

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16. Device according to one of claims 1 to 15, characterised in that the first element and/or the second conductive element (70) comprises several interconnected sections (71, 72, 73, 74) arranged in a

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substantially parallel way so as to form at least one meander or one coil.

17. Device according to one of claims 1 to 5 16, characterised in that the other element (200) comprises a plane or a metal plated surface portion or a network of conductive meshes, particularly a network of substantially circular, square, hexagonal or polygonal meshes, or a grid.

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18. Device according to one of claims 1 to 17, characterised in that each conductive element (30, 40, 70, 200) lies in a plane substantially parallel to the side surface (A, B) of the chip.

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19. Device according to one of claims 1 to 18, characterised in that the conductive elements (30, 40, 70, 200) of the chip are coated with an encapsulation material.

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20. Chip card, characterised in that it includes at least one electronic device according to one of claims 1 to 19.

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21. Encryption or decoding device characterised in that it includes one or more electronic devices according to one of claims 1 to 19.